

WHAT IS CLAIMED IS:

1. (currently amended) A camshaft adjuster for motor vehicles, the camshaft adjuster comprising:

an oscillating motor comprising a rotor that is fixedly connected to a camshaft and further comprising a stator surrounding the rotor, wherein the rotor is rotatable relative to the stator;

wherein at least one connecting part acting by at least one of positive engagement and force transmission is provided on a camshaft having cams;

wherein the rotor has a base member and vanes that are connected to the base member and project radially outwardly from the base member;

wherein the base member has a central opening and that is fixedly mounted with the central opening on the at least one connecting part;

wherein the base member has central opening has an inner [[a]] diameter that is greater than different from a diameter of a circle circumscribing the cams of the camshaft.

2. (original) The camshaft adjuster according to claim 1, wherein the at least one connecting part is a positive-engagement part and has a non-round cross-section.

3. (original) The camshaft adjuster according to claim 1, wherein the at least one connecting part is a positive-engagement part and has a polygonal cross-section.

4. (currently amended) The camshaft adjuster according to claim 3, wherein the rotor has vanes projecting radially from the base member, wherein a number of corners of the polygonal cross-section matches a number of the vanes of the base member.

5. (canceled)

6. (original) The camshaft adjuster according to claim 1, wherein the at least one connecting part is a positive-engagement part having at least one positive-engagement element.

7. (withdrawn) The camshaft adjuster according to claim 6, wherein the positive-engagement element is provided on a cylindrical wall of the positive-engagement part.

8. (withdrawn) The camshaft adjuster according to claim 6, wherein the

positive-engagement element extends axially.

9. (withdrawn) The camshaft adjuster according to claim 6, wherein the positive-engagement element is a rib.

10. (withdrawn) The camshaft adjuster according to claim 6, wherein the base member of the rotor is provided with at least one groove for receiving the positive-looking element.

11. (withdrawn) The camshaft adjuster according to claim 1, wherein the at least one connecting part is a force transmission part embodied as a cone.

12. (withdrawn) The camshaft adjuster according to claim 11, wherein the base member of the rotor has a wall surface that forms a conical surface.

13. (original) The camshaft adjuster according to claim 1, wherein the connecting part is a monolithic part of the camshaft.

14. (original) The camshaft adjuster according to claim 1, wherein the camshaft has at least one axial stop for the oscillating motor.

15. (original) The camshaft adjuster according to claim 14, wherein the axial stop is a radial collar of the camshaft.

16. (original) The camshaft adjuster according to claim 14, wherein the axial stop is a monolithic part of the camshaft.

17. (original) The camshaft adjuster according to claim 14, wherein the connecting part extends away from the axial stop.

18. (withdrawn) The camshaft adjuster according to claim 1, further comprising at least one axial securing element configured to be fastened on the camshaft.

19. (withdrawn) The camshaft adjuster according to claim 18, wherein the axial safety element frictionally engages the camshaft.

20. (withdrawn) The camshaft adjuster according to claim 18, wherein the axial securing element is positively engages the camshaft.

21. (withdrawn) The camshaft adjuster according to claim 18, wherein the axial safety element is press-fit onto a free end of the camshaft.

22. (withdrawn) The camshaft adjuster according to claim 18, wherein the axial safety element is annular.

23. (withdrawn) The camshaft adjuster according to claim 18, wherein the axial

securing element is a spring ring.

24. (withdrawn) The camshaft just to according to claim 18, wherein the axial securing element is an annular disk secured by a groove nut.

25. (withdrawn) The camshaft adjuster according to claim 24, wherein the groove nut is screwed onto a threaded end of the camshaft.

26. (original) The camshaft adjuster according to claim 1, wherein the camshaft is a hollow shaft.

27. (original) The camshaft adjuster according to claim 26, further comprising an insert inserted into the hollow shaft.

28. (original) The camshaft adjuster according to claim 27, wherein the insert has supply lines for a pressure medium.

29. (original) The camshaft adjuster according to claim 28, wherein the camshaft has radial bores communicating with the supply lines of the insert.